

REMARKS

In the Office Action, claims 27-32 were rejected under 35 U.S.C. § 112, second paragraph, and 35 U.S.C. §102(e), or in the alternative under § 103, as being unpatentable in view of U.S. Patent No. 6,773,692 to Pecharsky et al. ("Pecharsky"). Claims 27 and 28 are amended herein. Applicants respectfully submit that the rejections have been overcome for at least the reasons below.

In the Office Action, claims 27-32 have been rejected under 35 U.S.C. § 112, second paragraph. In response, independent claims 27 and 28 have been amended. As amended, the markush group defined in the claims includes transition metals belonging to Groups III to V of the periodic table, chromium, iron, nickel, alkali metals, compounds thereof and combinations thereof. Therefore, the claims should be considered clear in meaning, and thus, the rejection pursuant to 35 U.S.C. § 112 should be withdrawn in view of same.

In the Office Action, claims 27-32 are rejected under 35 U.S.C. § 102 and/or in the alternative under 35 U.S.C. § 103 in view of U.S. Patent No. 6,773,692 ("Pecharsky"). As previously provided, independent claims 27-28 have been amended. Now, each of these claims recites in part that the aluminum hydride has a hydrogen capacity greater than the alanate. The aluminum hydride in addition to the dopant provides the hydrogen occluding material with the ability to release a greater amount of hydrogen gas at a lower temperature as compared to the alanate as claimed. Indeed, the present inventors have recognized that the aluminum hydride (e.g., AlH_3), in addition to the dopant, permits a large amount of hydrogenation and/or dehydrogenation in one stage at a low temperature. See, specification, page 6, lines 22-26. For example, the present inventors have shown that a pulverized amount of AlH_3 in combination with a dopant that includes NaH and TiCl_3 yield the release of hydrogen at a temperature in the range of about 85°C . See, specification, example 5, page 13 and Figure 5.

In contrast, Pecharsky is directed to an alanate-based material. Indeed, each of the specific examples in Pecharsky identify a material made from LiAlH_4 and not an aluminum hydride, such as AlH_3 , a required by the claimed invention. Further, the specific example in Pecharsky merely provide for the use of a single catalyst, namely, TiCl_4 . This contrasts the claimed dopant as further defined in claims 29-32. Based on at least these reasons, Applicants believe that Pecharsky on its own is distinguishable from the claimed invention.

Accordingly, Applicants respectfully request that the anticipation and alternative obviousness rejections in view of Pecharsky be withdrawn.

For the foregoing reasons, Applicants submit that the present application is in condition for allowance and earnestly solicit reconsideration of same. The Commissioner is hereby authorized to charge deposit account 02-1818 for any fees which are due and owing.

Respectfully submitted,

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